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ABSTRACT

An attributional intervention was designed to reduce aggressive males' tendency to attribute hostile intentions to peers and their concomitant reactive aggression. Subjects were 162 African-American and Latino elementary school boys--aggressive and nonaggressive--in grades 3 through 6. Subjects were randomly assigned to the attributional intervention or to one of two control conditions. Data were collected from subjects' attributions about hypothetical scenarios, a laboratory task, disciplinary referrals to the school office, and teacher ratings of aggressive behavior. Results showed that aggressive subjects in the attributional intervention reduced their presumptions of hostile intent in laboratory simulations of peer provocation and, to a lesser extent, in response to scenarios. They were also less likely than the control subjects to be referred to the school office for disciplinary action and were rated by their teachers as less aggressive than control subjects following the treatment. (Author/DR)

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ED 381 283

REDUCING PEER DIRECTED AGGRESSION IN THE ELEMENTARY GRADES: THE EFFECTS OF AN ATTRIBUTION RETRAINING PROGRAM

Paper presented at the 61st Biennial Meeting of the Society for Research on Child Development

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Abstract

An attributional intervention was designed to reduce aggressive males' tendency to attribute hostile intentions to peers and their concomitant reactive aggression. African-American and Latino elementary school boys (N=162), aggressive and nonaggressive, in grades 3-6, were randomly assigned to the attributional intervention, or one of 2 control conditions. Data were collected on subjects' attributions about hypothetical scenarios, a laboratory task, disciplinary referrals to the school office, and teacher ratings of aggressive behavior. Aggressive subjects in the attributional intervention reduced their presumptions of hostile intent in laboratory simulations of peer provocation and to a lesser extent in response to scenarios. They were also less likely to be referred to the school office for disciplinary action and were rated as less aggressive by their teachers following the treatment. Both the benefits of attributional change and its limitations in aggression reduction were discussed.

Background and Significance

Research suggests that there is a linear progression in aggressive behavior; those youth who engage in serious aggression and violence have previously passed through a continuum of less severe, albeit antisocial acts (Patterson, 1992). However, the older the age of initial measurement of aggression, the greater the stability correlation over equal intervals (Olweus, 1979). Thus early aggression, rather than signalling the onset of an immutable characteristic, should be amenable to alteration.

Research has convincingly connected peer directed aggression to a child's tendency to attribute hostile intent to peers in ambiguous situations (see Dodge & Crick, 1990, for a review). For example, if asked to envision being bumped by a peer while walking down the hallway at school, the excessively aggressive child is more likely to state that the bump was "on purpose", in the absence of any additional social information. The average child is likely to presume accidental peer intent (Waas, 1988), or to request additional information (Dodge & Newman, 1981). If biased attributions instigate an information processing sequence leading to aggressive retaliation, then attributional change represents a potential strategy to mitigate a child's tendency toward peer directed, retaliatory aggression.

To test this premise, I developed a 12-session attribution retraining intervention. This curriculum (see Hudley, 1994) is based on formulations of Weiner (1991) which link attributions of intent to behavior through the mediating role of emotion. If one of the parties an interaction attributes a negative outcome (e.g., a homework assignment is destroyed by a peer) to causes controllable by the other party s/he will believe that the other party deliberately caused harm, and anger should be elicited. One possible behavioral response to perceived controllability of negative outcomes is

aggression. In contrast, if the negative outcome is perceived as resulting from unintentional causes, anger and aggression should not be aimed at the peer partner in the interaction. Linkages between attributions of hostile intent, feelings of anger, and retaliatory aggression have been previously documented among children in late childhood and early adolescence (Graham, Hudley, & Williams, 1992).

Late childhood and early adolescence have been identified as a critical period when aggression and violence become stable behaviors (Loeber and Stouthamer-Loeber, 1987). Thus, my initial intervention efforts were directed at students in upper elementary grades (4-6). Participating boys reduced their judgments of perceived intentionality and were also rated by their teachers as less aggressive following the intervention (Hudley, 1994; Hudley & Graham, 1993). However, the utility of this intervention for younger children was not evaluated.

Children distinguish acts of accident and intent no later than the age of 5 or 6 (Shantz, 1983) and use intent information in assigning blame to others no later than age 8 (Fincham & Jaspars, 1979). Yet the connection between attribution retraining and behavior change for this age group has not been established. Thus, in line with the movement toward early intervention in educational settings, I have added third grade boys to the latest intervention program. This longitudinal investigation will continue for an additional 18 months; the data reported here represent the pre- and post-treatment assessments.

Methods

Participants, all males, were enrolled in grades 3 through 6 in three elementary schools in the greater Los Angeles area. Students were selected through a combination of sociometric nominations for aggressive behavior

and teacher ratings (see Hudley and Graham, 1993 for a full description of the selection procedures). Students met twice weekly during the school day in an unoccupied classroom at their school site for six weeks in groups of six students, four aggressives and two nonaggressives. Each group contained students in adjacent grades (3-4, 4-5, or 5-6). The nonaggressive students were included to avoid stigmatizing intervention participants, to provide positive peer models, and to evaluate the effects of treatment on these children.

The attribution retraining intervention is designed to reduce aggressive students' tendency to infer hostile intentions in peers following ambiguously caused peer provocations. For example, if a child in a busy lunch line is bumped by a peer and his milk spills, he might assume that the peer deliberately intended to spill his milk. Alternatively, he might first assume that in the crowded, boisterous line the peer was also bumped, and that caused the peer to carom into him. In the second interpretation, the milk spilled as a result of conditions inherent in the situation and relatively uncontrollable by the peer. See Figure 1 for a listing of topics addressed in each of the 12 sessions of the intervention curriculum.

A placebo condition, included to control for participation effects, focused on nonsocial problem solving skills. A control group participated in pre-testing and post-testing only.

Dependent Measures

I report here findings from four primary measures: teacher ratings of behavior, school disciplinary records, a hypothetical scenario measure of attributional change, and an experimental co-operative task. The first three measures were collected immediately prior to intervention and again at its completion. The experimental task was collected only at post assessment.

Teacher ratings of aggressive behavior were collected using the teacher form of the Social Skills Rating System (Gresham & Elliot, 1990). To assess the efficacy of this intervention, I focused on the subscale score for self-control. A records search was conducted at each school site to determine the number of times participants were referred out of class for formal disciplinary action. Data were collected for the school semester immediately preceding the experimental interventions, and again for the semester immediately following intervention.

A hypothetical judgement questionnaire was used to assess attributional change. This measure presented the students with five written scenarios resulting in a negative outcome for the protagonist. In each scenario, a male peer was involved in the social situation, and his intentions were systematically varied by the provision of appropriate social cues. Students received one hostile, one accidental, and one prosocial scenario, as well as two ambiguous scenarios, in which all social information necessary to attribute intentions had been removed. Students were told to respond as though the hypothetical situation had actually happened to them.

Interactions with an actual peer were examined after the intervention in a referential communication task consisting of a simple map reading task with three trials. Approximately one-third of the aggressive subjects were randomly selected from each intervention type to participate in what they were told was a "new game being developed to use in social studies". Aggressive students were paired with an average peer who was seated behind a barrier. The peer was first asked to direct his unseen partner to a previously determined destination, without telling the partner the actual destination. For the first trial only, the two maps were dissimilar, and the peer's directions could not aid the subject in arriving at the correct site.

Subsequent trials were structured to guarantee success, enabling each participant to win a small prize. At the end of the task, the aggressive subject privately rated (on a seven point scale) his judgement of the hostility of the peer's intent and his own anger.

Results

Complete data on pre- and post-assessments are available for 25 participants in third grade (N=162 students in grades 3-6). Discipline referrals as well as teacher and scenario ratings were analyzed in a factorial MANOVA (grade X treatment group X time of measurement) with repeated measures on the third factor. What follows is a description of findings for aggressive students.

Teacher ratings of self control displayed a significant grade X time interaction ($F[3, 103]=4.65$, $p<.01$), with third graders overall showing the greatest increases in teacher ratings (see Figure 2 for means). As well, there was a significant group X time interaction ($F[2, 103]=3.25$, $p<.05$). These complex interactions tended to favor the younger members in the attribution retraining group, although the three way interaction was not significant.

Children's referrals to an administrator for disciplinary action also revealed a significant group X time interaction ($F[2, 150]=3.25$, $p<.05$), which again favors the attribution retraining group (see Figure 3 for means). Children in the attribution group overall had the fewest disciplinary referrals. An inspection of means also demonstrates that referrals generally tend to increase with grade level, though this effect was not significant.

Children's ratings of hypothetical scenarios of ambiguous causation revealed a significant group X time interaction ($F[2, 150]=3.25$, $p<.05$). Generally, children in the control condition tended to increase their perceptions of hostile intent, while children in the attribution retraining and

attention programs tended to remain the same. However, this significant interaction is mitigated by a trend ($p=.09$) in the three way interaction (group X grade X time). In fact, the third grade students in the attribution retraining group actually increased their perceptions of hostile intent from pre to post assessment, while students in the higher grades tended to decrease their perceptions by approximately one-half point (see Figure 4 for means). Students in the placebo and the control conditions, including the third graders, tended to remain the same or to increase their ratings of perceived hostility.

Ratings of the experimental task, which were collected at post assessment only, were analyzed in a factorial ANOVA, with intervention type and grade as between-subjects factors. Only the main effect of intervention type was significant, $F(2,49)=5.76$, $p<.01$. Ratings again favored the participants in the attribution retraining group, as all three groups differed significantly from one another (see Figure 5 for means).

Discussion

Overall, these data suggest that behavior changes can be achieved for students as early as third grade through participation in an attributional intervention. Both teacher ratings and disciplinary referrals showed improvements for the third grade aggressive participants. In addition, these third graders were as likely as students from upper grades to rate the hostility of an actual peer relatively lower in comparison to other participants.

The one anomalous finding is the tendency for third grade attribution retraining participants to increase their perceptions of hostile peer intent in hypothetical scenarios of ambiguous causation. Two possible explanations may be posited for this finding. It may be that the attributional intervention

has made the construct of peer intent highly salient to these children, but they are unable to adequately utilize their new information in a hypothetical situation. A child's shift in thinking from primarily concrete events rooted in the here and now to events and operations in the abstract is a prominent, enduring theme in the study of cognitive development (e.g., White & Seigel, 1984). Thus for younger subjects, the cognitive load of the hypothetical task may pose greater difficulties in applying new information than does the concrete, experimental task. Alternatively, the scenario instrument may simply not be as well understood by younger students as it is by older students. For example, younger students might simply select higher numbers, which represent affirmatives ("yes" answers) in the assumption that these are the "correct answers". However, the correlations between response items and subject age were generally low and nonsignificant (r's ranging from -.08 to .17), casting doubt on the presence of a directional response bias. Additional analyses will seek to determine if other response biases (e.g., random responses) are operating.

Attribution retraining appears to be one viable treatment option for the reduction of aggressive behavior among elementary school boys. As with any intervention, individual differences make some children more likely than others to benefit from an attributional change program. In addition, developmental considerations may make younger boys less likely to benefit from such a cognitively oriented curriculum. Future research must continue to evaluate developmental considerations and individual difference variables to best identify those students who are most likely to profit from participation. Understanding how behavioral change is linked to a more accurate understanding of one's own behavior as well as the behavior of peers

may make an important contribution to the development of powerful strategies for the reduction of childhood aggression and violence.

References

Dodge, K. & Crick, N. (1990). Social information-processing bases of aggressive behavior in children. Personality and Social Psychology Bulletin, 16, 8-22.

Dodge, K. & Newman, J. (1981). Biased decision-making processes in aggressive boys. Journal of Abnormal Psychology, 90, 375-379.

Fincham, F & Jaspars J. (1979). Attribution of responsibility to the self and other in children and adults. Journal of Personality and Social Psychology, 37, 1589-1602.

Graham, S., Hudley, C. & Williams, E. (1992). Attributional and emotional determinants of aggression among African-American and Latino young adolescents. Developmental Psychology, 28, 731-740.

Hudley, C. (1994). The reduction of childhood aggression using the BrainPower Program. In M. Furlong & D. Smith (Eds.), Anger, hostility and aggression: Assessment, prevention, and intervention strategies for youth (pp. 313-344). Brandon, VT: Clinical Psychology Publishing Co.

Hudley, C. & Graham, S. (1993). An attributional intervention to reduce peer directed aggression among African-American boys. Child Development, 64, 124-138.

Loeber, R. & Stouthamer-Loeber, M. (1987). Prediction. In H. Quay (Ed.), Handbook of juvenile delinquency (pp. 325-382).

Olweus, D. (1979). Stability of aggressive reaction patterns in males: A review. Psychological Bulletin, 86, 852-875.

Patterson, G. (1992). Developmental changes in antisocial behavior. In R. DeV. Peters, R. McMahon, & V. Quinsey Eds.), Aggression and

violence throughout the life span (pp. 52-82). Newbury Park, CA: Sage.

Shantz, C. (1983). Social cognition. In P. Mussen (Ed.), Handbook of child psychology: Vol. 3. Cognitive development (pp. 495-547). New York: Wiley.

Waas, G. (1988). Social attributional biases of peer-rejected and aggressive children. Child Development, 59, 969-975.

Weiner, B. (1991). On perceiving the other as responsible. In R. Dientsbier (Ed.), Nebraska symposium on motivation (Vol. 38, pp. 165-198). Lincoln: University of Nebraska Press.

White, S. & Seigel, A. (1984). Cognitive development in time and space. In B. Rogoff & J. Lave (Eds.), Everyday cognition: Its development in social context (pp. 238-306). Cambridge, MA: Harvard University Press.

FIGURE 1

Lesson 1. Discusses goals and benefits of BrainPower program.

Lesson 2. Focuses on the manner by which inferences of intent shape behavior. Activity: Role play peer interactions.

Lesson 3. Introduces the concept of nonverbal cues as an aid to intention detection. Activity: Picture identification game.

Lesson 4. Discusses how one's own feelings may interfere with intention detection. Activity: Unfinished sentences.

Lesson 5. Continues exploration of processes for intention detection. Activity: View prepared videotapes.

Lesson 6. Reviews the skills necessary for accurate intention detection. Activity: Create videotapes.

Lesson 7. Focuses on the idea that ambiguous situations do not really fit any one category. Activity: Review videotapes.

Lesson 8. Contrasts controllable and uncontrollable social causes. Activity: Respond to unfinished story.

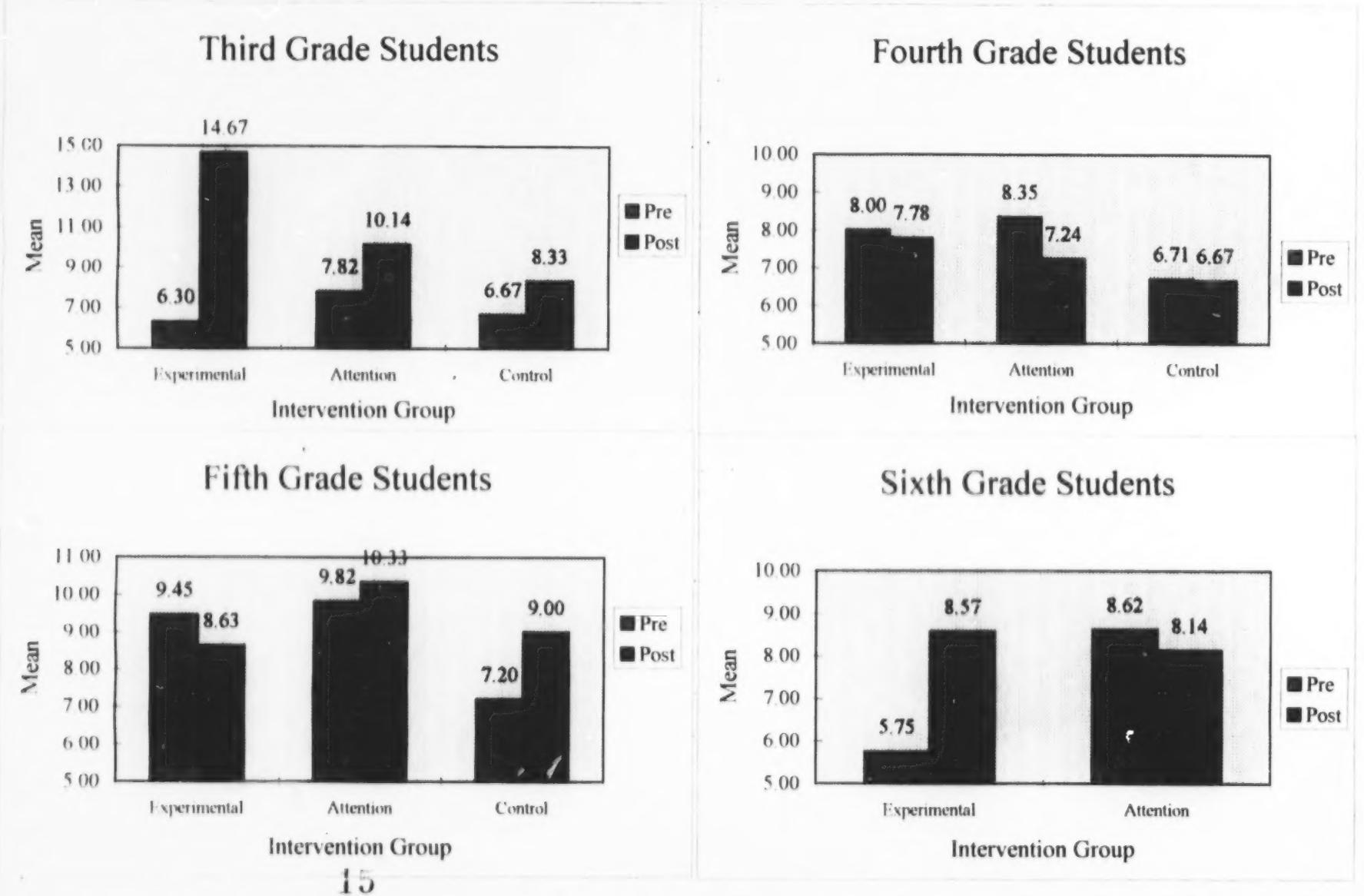
Lesson 9. Addresses how to detect similarities/differences and categorize situations. Activity: Role play peer interactions.

Lesson 10. Introduces appropriate action when responding to ambiguous situations. Activity: Brainstorming.

Lesson 11. Reviews the behaviors for use in ambiguous or accidental situations. Activity: Role play peer interactions.

Lesson 12. Reviews the sequence of skills presented.

Figure 2. **Teacher Ratings of Self-Control by Grade Level**
Aggressive Subjects

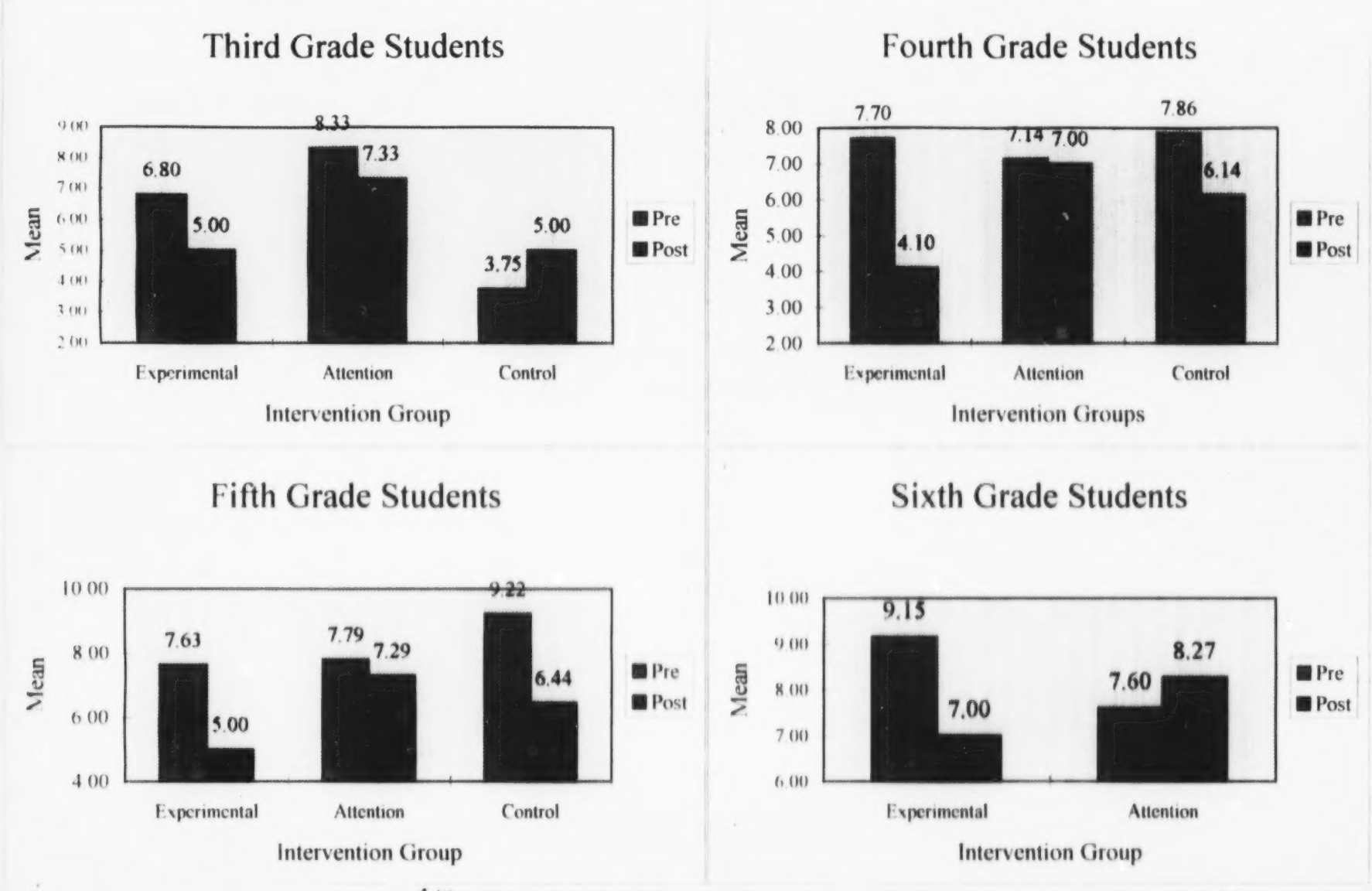


***Note: HIGHER VALUES DENOTE GREATER PERCEIVED SELF-CONTROL**

Figure 3.

Discipline Referrals by Grade Level

Aggressive Subjects

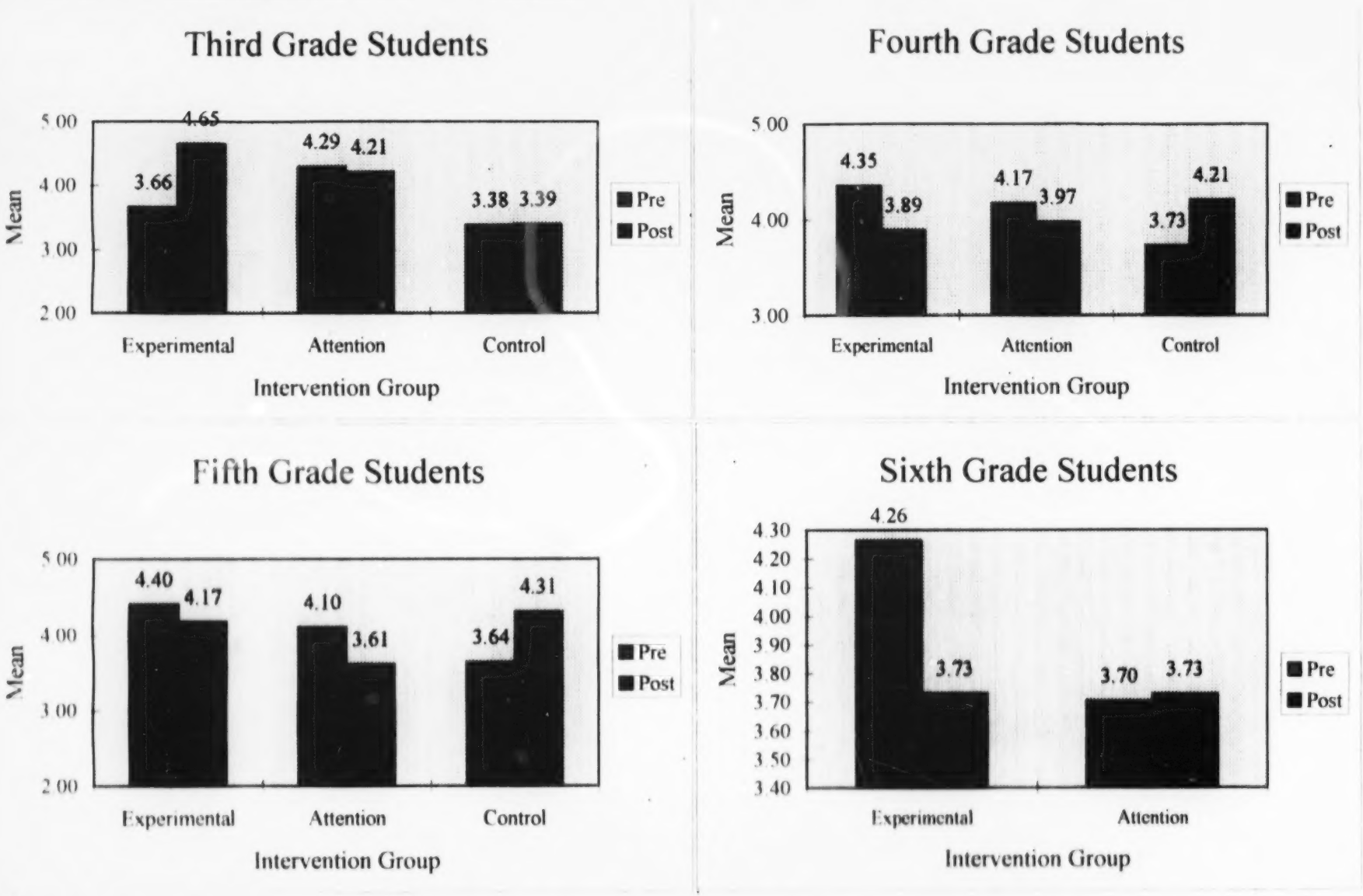


17

18

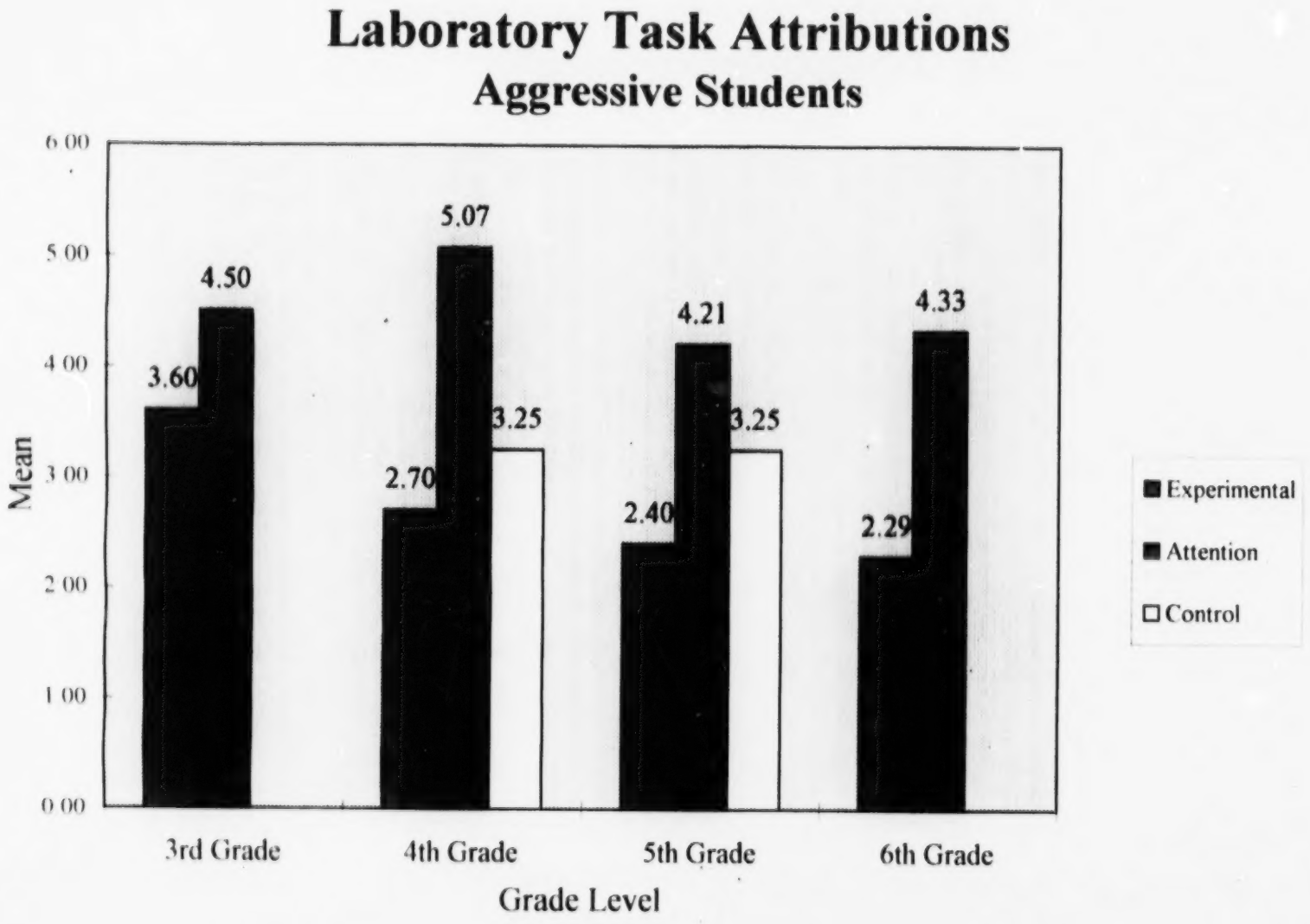
***Note: HIGHER VALUES DENOTE GREATER NUMBER OF DISCIPLINE REFERRALS**

Figure 4. **Hypothetical Scenario by Grade Level**
Aggressive Subjects



*Note: HIGHER VALUES DENOTE GREATER PERCEIVED HOSTILE INTENT

Figure 5.



*Note: HIGHER VALUES DENOTE GREATER PERCEIVED HOSTILE INTENT